

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM

Instrument Procedures Group

April 29-30, 2002

HISTORY RECORD

FAA Control # 02-01-242

Subject: LPV Minima Charting

Background/Discussion: The FAA has announced that it will implement a new type of approach using the Wide Area Augmentation System (WAAS). This approach combines the lateral precision of a localizer with the vertical performance of APV-1 (Approach Procedure with Vertical Guidance Level-1), and provides a significant operational benefit as compared to APV-1 or LNAV/baro-VNAV approaches. An ICAO GNSS Panel Information Paper that details the entire concept is available, upon request. This paper describes the LPV operational concept and summarises the estimated benefits from the new LPV approaches.

The FAA proposes that this new LPV minima line be charted on the existing RNAV SIAP's. The LPV line will replace the GLS line. The GLS line is not currently being used and it may be as long as 2015 until WAAS or other RNAV systems provide this capability. GLS may be more appropriately used in the near future (2004 – 2005 time frame) on SIAPs for GNSS-based landing systems, such as FAA's Local Area Augmentation System (LAAS).

Recommendations: That the new LPV minima line be charted on the existing RNAV SIAP's. Other WAAS/LPV specific charting issues (such as the new WAAS "channel number") can be implemented when defined in criteria for LPV approaches that will be published by the FAA (AFS-420) later this year (2002).

Comments: This recommendation affects IACC charting specifications.

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INITIAL DISCUSSION (Meeting 02-01): New issue presented by Hank Cabler, AFS-410. Hank provided a briefing on the FAA concept to implement a new type approach using the Wide Area Augmentation System (WAAS). FAA proposes charting an LPV minima line on the existing RNAV approach chart in the section currently reserved for GLS minimums. This proposal was originally presented at the ATA FMS Task Force and recommended for presentation and consensus at the ACF. Jim Terpstra, Jeppesen stated that the first WAAS SIAPs are targeted for publication in July/August, 2003. Joe Corrao, HAI, expressed support for the proposal and stated that HAI doesn't want to see APV slowed

down. HAI would rather see APV sooner rather than later. The majority of the group expressed approval with Hank's charting concept; however, there were two exceptions. Mitch Scott, ATA, stated that ATA does not support this change and requested that a RNP line of minima be published. Mitch further stated that LAAS provides better benefits than the proposed LPV concept and that ATA has invested heavily on the RNP concept and that GLS belongs to LASS. Marc Henegar, Alaska Airlines, stated that his organization would support WAAS, but not at the expense of RNP. Norm recommended that ATA forward a final position on the issue to AFS-420. Norm LeFevre will take the issue back to the ATA FMS Task Force and to the Aeronautical Information Service Working group (AISWG) for further consideration and report back. **ACTION: ATA and AFS-420.**

MEETING 02-02: Tom Schneider, AFS-420, briefed that LPV minimums' charting was discussed at the AISWG and the FAA position is that LPV minima will replace the current GLS minima line on approach charts. Order 8260.50 has been signed and specifies criteria for LPV minima determination. Change 3 to Order 8260.19, which is currently in coordination, will contain instructions for completing the 8260-series forms. See item 3b in the minutes for a synopsis of Tom's RNP briefing. **ITEM CLOSED.**
